Aheli Ghosh

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EDUCATION

Delhi Technological University

2017-2021

B. Tech, Computer Engineering CGPA: 8.84 / 10.0, First division with distinction

New Delhi

New Sainik Public Sr. Sec. School

2017

CBSE AISSCE: 93.5%

New Delhi

WORK EXPERIENCE

Software Engineer, Microsoft

June 2021 - Present

- Part of the Fluid Framework and Experiences team. (product)
- Leveraging **React** and **Typescript** to build collaborative, low-latency components that integrate with Teams, Outlook and the M365 Suite.

Summer Analyst, Citibank (ppt)

June 2020 - July 2020

- Launched end-to-end tool for task-based categorization of incoming email stream.
- Solely responsible for data preprocessing with **Spacy NLP pipeline**, word vectorization with **GloVe 6B embeddings**. Employed **few-shot learning** with machine learning algorithms.
- Accomplished response time of 20 ms/prediction with XGBoost algorithm (89% accuracy).

Student Researcher, Samsung Innovation Lab, DTU (link)

March 2020 - Jan 2021

- Mobile camera based app to detect effects of flame gazing exercise on sustained attention span. (demo)
- Utilized OpenCV and Dlib for pupil tracking.
- Achieved avg. 3.3% increase in attention in volunteers.

Internship Trainee, Maruti Suzuki India Ltd

Dec 2018 - Jan 2019

- Learned to utilize SQL querying on the company's attendance management database.
- Increased accuracy by 20%, which aided better tracking of attendance defaulters.

PUBLICATIONS

"Fighting Media Hyper-partisanship with Modern Language Representation Models"

Presented at ICDAM 2021 (double-blind peer reviewed), Paper in Press with Springer Lecture Notes

"mFlameGaze: Mobile-Based Flame Gazing for Improving Sustained Attention"

Presented at COMSNETS 2021 (peer reviewed) NetHealth Workshop, Paper link: IEEE Xplore

"Classifying Question Papers with Bloom's Taxonomy Using Machine Learning Techniques"

Presented at ICACDS 2019 (double-blind peer reviewed), Paper link: Springer CCIS

TECHNICAL PROJECTS

Trippin (link)

Build for India Hackathon, IIT Delhi 2019

- Developed an innovative road safetyAndroid app to display optimal color-coded routes based on danger-index. Added features: driver mode, emergency SOS, post updates/complaints feed.
- Used MapMyIndia API to access routes, Firebase Realtime Database to handle posts and Google Places API for searching nearest hospitals/police stations.

FemHealth360 (link) (View live)

- Developed a platform for women's all-round wellbeing: period tracker to alert for possible menstrual abnormalities, personalized meal plans curator and exercise recommendations.
- Technology used: ExpressJS, Bootstrap, jsCalendar, Backend: MongoDB, NodeJS, hosted on Heroku.

Text Emojifier (link)

- Built text message sentiment analysis model that classifies amongst five chosen emojis.
- Employed GloVe word embeddings and stacked LSTMs with early stopping.

Telegram News Bot (link)

- Implemented a conversational Telegram chatbot(@aheli_news_bot) to display news of any type/language.
- Utilized: Dialogflow, Gnewsclient, Flask (backend), hosted on Heroku.

ACHIEVEMENTS

- Received **2nd** prize at LinkedIn Wintathon for mentor matching app, 2020
- Received 2nd prize at American Express Makeathon for investments suggestion app, 2020
- In top 6 teams, hack.asia finals, Singapore 2019
- Qualified **DELF A2** with **85**% score, 2018 (Issued by the French Ministry of Education)
- National Talent Search Examination(NTSE) Scholar, 2015 (in top 750 out of 800k applicants)

SKILLS

Programming: C, C++, Python, MySQL, HTML, Typescript

Operating Systems: Windows, Linux, MacOS

Frameworks/Libraries: Scikit-Learn, Numpy, Pandas, Matplotlib, Flask, BeautifulSoup, Scrapy, OpenCV, Tensorflow, Git, MongoDB, ExpressJS, React, Jest, NodeJS

VOLUNTEER/EXTRACURRICULAR EXPERIENCES

- Chief Technical Head, Computer Society of India-DTU (2020-21): Conducted DSA classes & prepared quizzes.
- Member, Climb, DTU: Mentored 25 girls at *SheHacks* hackathon, *Wrote* (Pg 10) for the Climb newsletter.
- Volunteer, Rotaract Club, DTU: Executed fundraiser for HelpAge India, 2019 Successfully raised INR 20k, Taught art and basic computer literacy to students (7-10 years old) at a school for underprivileged children.
- Member of Indian classical vocal choir at Madhurima (music society) DTU.